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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/676,221

09/30/2003

Henrik T. Jensen

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9701

7590

01/24/2005

James A. Harrison  
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EXAMINER

NGUYEN, JOHN B

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/676,221

Applicant(s)

JENSEN, HENRIK T.

Examiner

John B Nguyen

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-20 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 8,9 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### Claim Rejections - 35 USC 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7 and 10-12 are rejected under 35 U.S.C 102(e) as being anticipated by Abdelgany et al. (U.S. Patent No. 6,614,837 B1).

Regarding to claims 1-7 and 10-12, Figs. 1-5 of Abdelgany et al. teaches a radio transmitter, comprising: a digital processor (18, column 5, lines 44-56) that receives digital data, that digitally modulates the digital data to produce a digital information signal, and that compensates the digital information signal to produce a pre-compensated digital information signal that is pre-compensated for group delay variation and magnitude response characteristics of at least one downstream filter; a digital-to-analog converter (120, column 6, lines 55-58) that

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receives the pre-compensated digital information signal and that converts the pre-compensated digital information signal to produce a continuous waveform analog signal; a downstream filter (42) that filters the continuous waveform analog signal to produce a filtered continuous waveform analog signal, and phase locked loop circuitry (62') that receives the filtered continuous waveform analog signal to produce an output information signal in a selected frequency band, wherein the pre-compensated digital information signal is a digital IF signal having a bandwidth in the range of 200 kHz to 300 kHz (column 7, line 1), wherein the pre-compensated digital information signal is a digital baseband signal (column 6, lines 20-22), wherein the pre-compensated digital information signal is an intermediate frequency baseband signal (column 6, lines 20-22, 49-59), wherein the PLL, comprises: a phase-frequency detector (PFD) (88) coupled to receive the continuous waveform signal and coupled to receive a feedback signal, the PFD producing an error signal based at least in part on one of a phase or frequency of the feedback signal; a charge pump (90) for producing an error current responsive to the error signal; a narrow band loop filter (92) for converting the error current to an error voltage signal over a narrow frequency bandwidth; an oscillator (94) for producing an oscillation corresponding to a magnitude of the error voltage signal; and mixer (114) and filter circuitry (96) for feedback signal.

***Allowable Subject Matter***

3. Claims 14-20 are allowed.
4. The following is an examiner's statement of reasons for allowance:

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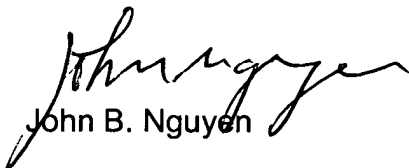
The prior art fails to teach or fairly suggest a radio transmitter, comprising:  
a PLL magnitude equalizer and a TX chain group delay equalizer. Therefore,  
claims 14-20 are allowed.

5. Claims 8, 9 and 13 are objected to as being dependent upon a rejected  
base claim, but would be allowable if rewritten in independent form including all  
of the limitations of the base claim and any intervening claims.

### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to  
applicant's disclosure. Klemmer (Pub. No.: US 2003/0176173 A1); Lin (Pub. No.:  
US 2003/0224736 A1); Rozenblit et al. (Pub. No.: US 2003/0176173 A1);  
Sointula (U.S. Patent No. 6,347,121 B1); Li et al. (U.S. Patent No. 6,415,001 B1);  
Damgaard et al. (U.S. Patent No. 6,671,500 B2); Hagberg (U.S. Patent No.  
5,948,046); Dickey et al. (U.S. Patent No. 6,032,028) are discloses a radio  
transmitter and other limitations of claims.

7. Any inquiry concerning this communication or earlier communications from  
the examiner should be directed to John B. Nguyen whose telephone number is  
(571) 272-1808. The examiner can normally be reached on Monday  
Friday, 08:00am-5:00pm.



John B. Nguyen  
January 20, 2005